

CLAIMS

1. A shutoff valve system with leak detector for automatically shutting off a water supply to a clothes washing machine, dish washing machine, sink, toilet, or refrigerator equipped with an ice maker, comprising:

5 a valve body having an inlet opening and an outlet opening which are in fluid communication, said inlet opening being connected to said water supply and said outlet opening being connected to any of the above mentioned appliances;

 a sealing member movable within said valve body between an open position wherein the sealing member does not block fluid flow, and a closed position wherein the
10 sealing member blocks fluid flow;

 a spring loaded outlet associated with said movable sealing member;

 a latch member which in the closed position restricts any movement of said spring loaded outlet;

 a cartridge having a water-soluble element;

15 a cable connecting said cartridge with said latch member; and

 actuator means within said cartridge which moves said latch member to an open position when said water-soluble element dissolves whereby said spring loaded outlet moves to a position which causes said sealing member to block fluid flow at the inlet opening.

20 2. The shutoff valve system of claim 1 wherein:

 the water-soluble element is in a compression mode.

3. The shutoff valve system of claim 1 wherein:

said cable pulls against a spring loaded latch vertical extension during valve closure.

4. The shutoff valve system of claim 1 wherein:

force is applied to said valve body surrounding said spring loaded outlet to move
5 it to a position which allows the latch member to return to a closed position and the sealing member to an open position.

5. The shutoff valve system of claim 1 wherein:

the actuator means has at least one spring which expands as the water-soluble element dissolves.

10 6. The shutoff valve system of claim 5 wherein:

the expanding spring moves a plunger attached to the end of said cable.

7. The shutoff valve system of claim 1 wherein:

said cartridge having a water-soluble element is replaceable.

8. The shutoff valve system of claim 7 wherein:

15 the water-soluble element is replaceable.

9. The shutoff valve system of claim 1 wherein:

said valve system is incorporated as an integral part of a standard water valve normally used to manually turn on and off the water supply to said appliances.

10. The shutoff valve system of claim 1 wherein:

20 the sealing member is an O-ring.